UNCLASSIFIED//

PTTUZYUW RULSBMS0409 3181900-UUUU--RHMCSUU.

ZNR UUUUU

P 141900Z NOV 13 ZYB

FM NAVSURFWARCEN SHIPSYSENGSTA PHILADELPHIA PA

TO COMNAVSURFLANT NORFOLK VA

COMNAVSURFPAC SAN DIEGO CA

INFO COMNAVSEASYSCOM WASHINGTON DC

COMNAVSAFECEN NORFOLK VA

SHIPSUPPACT NORFOLK VA

NAVSHIPYD AND IMF PEARL HARBOR HI

SOUTHWEST RMC SAN DIEGO CA

SOUTHEAST RMC MAYPORT FL

NAVSHIPREPFAC AND JAPAN RMC DET SASEBO JA

NAVSHIPREPFAC AND JAPAN RMC YOKOSUKA JA

NAVSHIPYD AND IMF PUGET SOUND WA

COMNAVRMC NORFOLK VA

SURFMEPP PORTSMOUTH VA

NAVSEALOGCEN MECHANICSBURG PA

COMNAVSUPSYSCOM MECHANICSBURG PA

USS HARPERS FERRY

USS OAK HILL

PEO SHIPS WASHINGTON DC

COMEXPSTRKGRU TWO

COMEXSTRIKGRU THREE

BT UNCLAS

PASS TO OFFICE CODES:

COMNAVSURFLANT NORFOLK VA//N431//

COMNAVSURFPAC SAN DIEGO CA//N431//

COMNAVSEASYSCOM WASHINGTON DC//05Z/21A/04/470//

COMNAVSAFECEN NORFOLK VA//30//

NAVSHIPYD AND IMF PEARL HARBOR HI//1200//

PEO SHIPS WASHINGTON DC//PMS400FT/FR/PMS470//

SECINFO/U/-//

MSGID/GENADMIN/NSWCCD-SSES 973/MRN454//

SUBJ/IN SERVICE ENGINEERING (ISE) ADVISORY NO. 034-13, SAFETY /

GUIDANCE FOR REPAIRING RECONFIGURING AND POWERING DOWN POWERFLEX /

700L DRIVES ON LSD 49 CLASS 30 TON CRANES MODIFIED BY SCD 102 /

CRANE CONTROLS UPGRADE//

REF/A/DESC:DOC/NAVSEA/08JUN2013//

REF/B/DESC:DOC/NAVSEA/NOV2013//

NARR/REF A IS THE CRANE SYSTEM TECHNICAL MANUAL, SG811-BT-MMA-010, 020, 030,

040. REF B IS E-MAIL FROM NAVSEA SEA 05Z44/G. MCCOY TO NSWCCD-SSES 973

PROVIDING TECH WARRANT HOLDER FOR CRANES CONCURRENCE WITH THIS ADVISORY.//

POC/RAFAEL RIVERA/CIV/UNIT: NSWCCD-SSES 973/NAME: PHILADELPHIA /TEL:215-897-

7676/EMAIL:RAFAEL.RIVERA@NAVY.MIL//

GENTEXT/REMARKS/1. PURPOSE: A. TO ALERT THE FLEET OF A POTENTIAL SAFETY HAZARD

ON LSD 49 CLASS CRANES MODIFIED BY SCD 102, 30 TON CRANE CONTROLS UPGRADE. TO DATE, UPGRADES HAVE BEEN INSTALLED ON USS HARPERS FERRY (LSD-49) AND USS OAK HILL (LSD-51).

B. TO PROVIDE SAFETY GUIDANCE FOR REPAIRING/RECONFIGURING AND POWERING DOWN POWERFLEX 700L DRIVES ON LSD 49 CLASS CRANES MODIFIED BY SCD 102, 30 TON CRANE CONTROLS UPGRADE.

2. BACKGROUND:

RECENTLY, DURING REPLACEMENT OF A DAMAGED DRIVE BOARD ON A LSD 49 CLASS SHIP MODIFIED BY SCD 102, 30 TON CRANE CONTROLS UPGRADE, IT WAS DISCOVERED THAT AN UNSAFE CONDITION EXISTS WITH THE DEFAULT SETTINGS OF THE POWERFLEX 700L DRIVES. SINCE REPLACEMENT DRIVE BOARDS ARE PROVIDED FROM THE FACTORY WITH DEFAULT PARAMETERS, AN UNINTENDED BRAKE RELEASE OCCURRED UPON INSTALLING THE REPLACEMENT BOARD AND STARTING UP THE SYSTEM. ISEA AND OEM ROCKWELL AUTOMATION HAVE DETERMINED THAT A FACTORY DEFAULT SETTING WILL RESULT IN THE RELEASE OF GEARBOX AND MOTOR BRAKES DURING STARTUP, CAUSING A BOOM OR HOOK TO FREE FALL IF NOT PROPERLY SECURED. AFTER RESTORING OPERATIONAL PARAMETERS TO DESIGN CONDITIONS, THE SYSTEM PERFORMS NORMALLY AND SAFELY. LOSS OF POWER OR TURNING OFF CRANE MAIN POWER SWITCH WILL ALWAYS CAUSE BRAKES TO SET AND SAFE SHUTDOWN. THIS WAS TESTED AND VERIFIED DURING INSTALLATION ON LSD-49 AND LSD-51.

3. RECOMMENDED ACTIONS:

A. SHIPS FORCE COMPLY WITH THE FOLLOWING WARNING AND PROCEDURES TO REPAIR, MODIFY, REPLACE OR RECONFIGURE THE POWERFLEX 700L DRIVE AND DRIVE COMPONENTS. WARNING: NEVER REPAIR, MODIFY, REPLACE OR RECONFIGURE POWERFLEX700L DRIVE AND DRIVE COMPONENTS WITHOUT FIRST STOWING THE CRANE AND DISABLING ALL THE BRAKES AT THE AUXILIARY ENCLOSURE. DISABLE BRAKES BY TURNING OFF CB0321 AND CB0322 FOR GEARBOX BRAKES AND CB0306, CB0307, CB0309 AND CB0310 FOR MOTOR BRAKES. FAILURE TO DO SO MAY CAUSE BRAKES TO RELEASE AND LOSS OF CONTROL. NEVER POWER DOWN THE CRANE FOR POWERFLEX 700L REPAIR UNLESS IT IS IN THE PROPER STOWAGE POSITION.

- 1. PRIOR TO REPAIRING, MODIFYING, REPLACING OR RECONFIGURING THE POWERFLEX 700L DRIVE, SHIPS FORCE MUST ENSURE THAT THE FOLLOWING BREAKERS IN THE AUXILIARY ENCLOSURE ARE DISABLED (TURNED OFF): CB0321, CB0322, CB0306, CB0307, CB0309, AND CB0310.
- 2. AFTER REPAIRING, MODIFYING, REPLACING OR RECONFIGURING THE POWERFLEX 700L DRIVE, SHIP'S FORCE MUST ENSURE THAT THE FOLLOWING BREAKERS IN THE AUXILIARY ENCLOSURE ARE ENABLED (TURNED ON): CB0321, CB0322, CB0306, CB0307, CB0309, AND CB0310.
- 3. NEVER POWER DOWN THE CRANE FOR POWERFLEX700L REPAIR UNLESS IT IS IN THE PROPER STOWAGE POSITION.
- B. SHIPS FORCE COMPLY WITH THE FOLLOW PROCEDURES IN THE EVENT OF A POWER LOSS DURING CRANE OPERATION.
- 1. IN THE EVENT OF A POWER LOSS DURING OPERATION, IMMEDIATELY TURN OFF THE CRANE'S MAIN POWER SWITCH (ON THE OPERATOR CONTROL CONSOLE).

 TAKE EXTRA PRECAUTION WHEN STARTING UP AFTER THE POWER LOSS TO ENSURE ALL PERSONNEL ARE CLEAR OF BOOM AND CRANE HOOKS. WHEN TURNING CRANE'S MAIN POWER SWITCH BACK ON, DO NOT REMOVE HAND FROM SWITCH AND BE PREPARED TO IMMEDIATELY TURN OFF MAIN POWER SWITCH SHOULD ANY UNCONTROLLED CRANE MOVEMENT OCCUR. CONTINUE TO MONITOR FOR 1 MINUTE FOLLOWING POWER UP. BE PREPARED FOR SUDDEN

BOOM OR HOOK MOVEMENT.

NOTE: LOSS OF POWER OR TURNING OFF CRANES MAIN POWER SWITCH WILL ALWAYS CAUSE THE SYSTEM TO FAIL SAFE AND THE BRAKES TO SET.

- 2. IF POWER WAS SECURED DUE TO UNCONTROLLED CRANE MOVEMENT, FOLLOW EMERGENCY LOWERING PROCEDURES, FOUND IN THE CRANE TECHNICAL MANUAL (REF A), FOR SAFE STOWAGE OF THE CRANE.
- C. ISEA OBTAIN WARNING PLACARDS FROM OEM AND ARRANGE/COORDINATE INSTALL WITH SHIPS. INVESTIGATE AND IMPLEMENT PERMANENT DESIGN SOLUTION WITH OEM TO ADD A SECOND LEVEL OF SAFETY, THROUGH THE PLC, FOR REDUNDANCY TO FURTHER PROTECT THE SYSTEM.
- 4. THIS ADVISORY HAS NO IMPACT TO PMS, SUPPLY SUPPORT/APLS, LIFE CYCLE TRAINING OR CLASS MAINTENANCE PLANS. TECHNICAL MANUAL REQUIRES REVISION TO INCORPORATE THE WARNING PLACARD INFORMATION AND PROCEDURES IN PARA C.
- 5. PER REF B, THE TECHNICAL WARRANT HOLDER FOR CRANES CONCURS WITH THIS ADVISORY
- 6. CANCELLATION CRITERIA: THIS ISE ADVISORY WILL REMAIN IN EFFECT UNTIL A PERMANENT DESIGN SOLUTION PROVIDING AN ADDITIONAL LAYER OF SAFETY IS INSTALLED ON AFFECTED SHIPS AND IMPACTED ILS IS UPDATED.
- 7. THIS ADVISORY WILL BE POSTED ON THE SAILOR TO ENGINEER (SE2) WEBSITE. ISEA ADVISORIES CAN BE VIEWED AT WEB SITE:

https://help.phdnswc.navy.mil/sites/s2e/pages/default.aspx.

USERS CAN REQUEST A PHD NSWC WEB ACCOUNT AT THE FOLLOWING ADDRESS:

https://accounts.phdnswc.navy.mil/udefault.aspx. VALID COMMON ACCESS CARD

(CAC) OR SMART CARD WITH AN EMAIL CERTIFICATION IS REQUIRED.

FOR FURTHER ASSISTANCE, SEND A DIGITALLY SIGNED EMAIL TO

ithelp.nswcphd.fct@navy.mil or COMM (805) 228-8191 OR DSN 296-8191.

8. REQUEST TYCOMS DISSEMINATE THIS ADVISORY TO AFFECTED SHIPS FOR ACTION.// BT

#0409

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<DmdsReleaser>GARCIA.AWILDA.1232160957</DmdsReleaser>